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EXAMINER	
CARPENTER, WILLIAM R	

ART UNIT	PAPER NUMBER
3767	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,041	FAGO, FRANK M.	
	Examiner	Art Unit	
	WILLIAM CARPENTER	3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) *26-34* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-10,15-25 and 35* is/are rejected.

7)☒ Claim(s) *6,7 and 11-14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

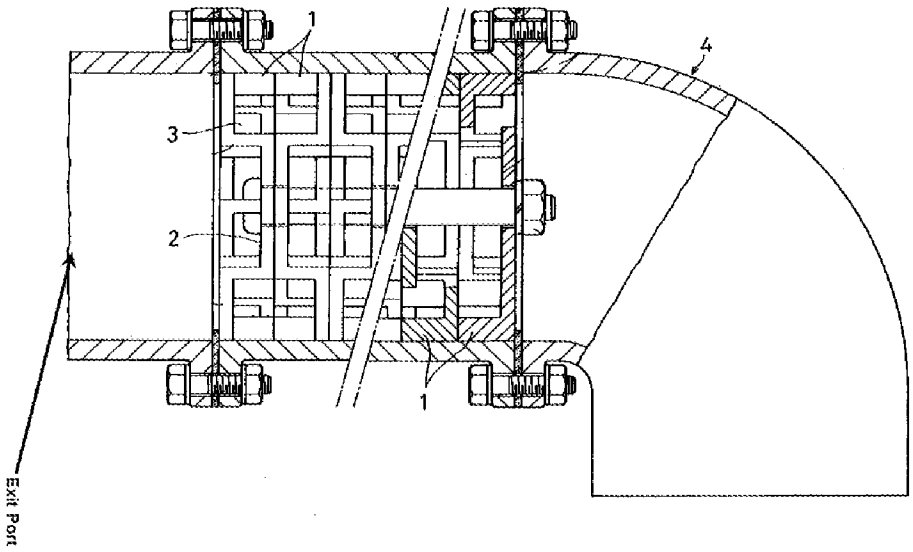
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

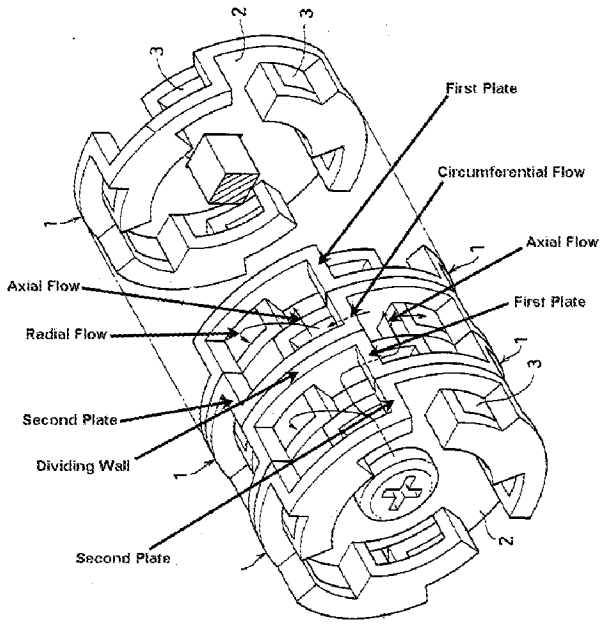
2. Claims 1, 16-19, 21, 23-35, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,368,382 ("Kawasaki et al.").

As regards to Claim 1, Kawasaki et al. discloses an apparatus for administering a suspendible agent in suspension including a suspendible agent, in the instant case concrete (Column 1, Lines 9-13), a suspension of cement, aggregate, water, chemical admixtures, and various other cementitious materials. Kawasaki et al. discloses a delivery container comprising the combination of a cement pump (Column 3, Lines 29-31) in combination with an external compartment comprising a feed pipe (4) having an exit port (See attached figure). Though not explicit, one would reasonably expect and appreciate that the cement pump as taught by Kawasaki et al. has access to a reservoir, either integrally formed with the pump or as an extension of the delivery container apparatus in a second external compartment. Kawasaki et al. further discloses a suspension apparatus disposed within the fluid path (1) including radial flow channels (3; See attached figure) and a plurality of circumferential flow channels (2; See attached figure) coupled in fluid communication by the radial flow channels. Furthermore, it is believed to further be inherent that the necessary reservoir for the

device contains a propellant fluid in the form of unmixed cement. Claim 1 does not require that the suspendible agent and propellant fluid be of distinct compositions. The mechanism of action for the device of Kawaski et al. includes a cement pump which induces a fluid to flow through the feed pipe (4) and through the suspension apparatus (1). In this manner the unmixed fluid induced to flow by the cement pump acts as a propellant fluid, forcing a quantity of mixed fluid temporarily disposed within the suspension apparatus (the suspendible agent) to be ejected from the apparatus via the exit port.



As regards to Claim 16, Kawasaki et al. discloses a pair of identical first plates (See attached figure) having a plurality of circumferential flow channels (2) and a plurality of radial flow channels (3) distributed between them.



As regards to Claim 17, Kawasaki et al. discloses a second plate (See attached figure) positioned between a pair of first plates separating the circumferential and radial flow channels on the upstream side of one first plate from the circumferential and radial flow channels on the downstream side of the other first plate.

As regards to Claim 18, Kawasaki et al. discloses the second plate to include an axial flow channel (See attached figure) which couples with the circumferential and radial flow channels of one of the first plates with the circumferential and radial flow channels of the other first plate. In the instant case the term "coupled" does not denote directly coupled and is instead assigned its ordinary dictionary definition of "to join for combined effect". The axial flow channels of the second plate allow for indirect connection of the radial and circumferential channels of the first plates through the radial and circumferential channels of the second plate.

As regards to Claim 19, Kawasaki et al. discloses an apparatus for administering a suspendible agent in suspension, in the instant case concrete (Column 1, Lines 9-13), a suspension of cement, aggregate, water, chemical admixtures, and various other cementitious materials. Kawasaki et al. discloses a delivery container comprising the combination of a cement pump (Column 3, Lines 29-31) in combination with an external compartment comprising a feed pipe (4) having an exit port (See attached figure). Though not explicit, one reasonably expect and appreciate that the cement pump as taught by Kawasaki et al. has access to a reservoir, either integrally formed with the pump or as an extension of the delivery container apparatus in a second external compartment. Kawasaki et al. further discloses a suspension apparatus disposed within the fluid path (1) including radial flow channels (3; See attached figure) and a plurality of circumferential flow channels (2; See attached figure) coupled in fluid communication by the radial flow channels. Furthermore, it is believed to further be inherent that the necessary reservoir for the device contains a propellant fluid in the form of unmixed cement. Claim 19 does not require that the suspendible agent and propellant fluid be of distinct compositions. The mechanism of action for the device of Kawaski et al. includes a cement pump which induces a fluid to flow through the feed pipe (4) and through the suspension apparatus (1). In this manner the unmixed fluid induced to flow by the cement pump acts as a propellant fluid, forcing a quantity of mixed fluid temporarily disposed within the suspension apparatus (the suspendible agent) to be ejected from the apparatus via the exit port. In the instant case the external compartment/feed pipe is believed to be an extension of, and therefore a part of, the delivery container. Claim 19

does not require that the delivery container comprise a single unitary structure. As such, in the instant case the delivery container of Kawasaki is determined to be the external compartment/feed pipe, the cement pump, and the necessary reservoir (either an integral part of the cement pump or comprising a second external compartment). Therefore the suspension apparatus is deemed to be positioned inside the delivery container.

As regards to Claim 21, Kawasaki et al. discloses an apparatus for administering a suspendible agent in suspension, in the instant case concrete (Column 1, Lines 9-13), a suspension of cement, aggregate, water, chemical admixtures, and various other cementitious materials. Kawasaki discloses a delivery container comprising the combination of a cement pump (Column 3, Lines 29-31) in combination with an external compartment comprising a feed pipe (4) having an exit port (See attached figure). Though not explicit, one would reasonably expect and appreciate that the cement pump as taught by Kawasaki et al. has access to a reservoir, either integrally formed with the pump or as an extension of the delivery container apparatus in a second external compartment. Kawasaki et al. further discloses a suspension apparatus (1) disposed within the fluid path including a plurality of first plates (See attached figure) and second plates (See attached figure) with a stacked arrangement, with each pair of first and second plates being separated by a plurality of dividing walls (See attached figure) in part defining a plurality of circumferential flow channels capable of being filled with a contrast agent and configured to permit axial flow (See attached figure) between the plurality of circumferential flow channels. Furthermore, it is believed to further be

inherent that the necessary reservoir for the device contains a propellant fluid in the form of unmixed cement. Claim 21 does not require that the suspendible agent and propellant fluid be of distinct compositions. The mechanism of action for the device of Kawaski et al. includes a cement pump which induces a fluid to flow through the feed pipe (4) and through the suspension apparatus (1). In this manner the unmixed fluid induced to flow by the cement pump acts as a propellant fluid, forcing a quantity of mixed fluid temporarily disposed within the suspension apparatus (the suspendible agent) to be ejected from the apparatus via the exit port.

As regards to Claim 23, Kawasaki et al. discloses that the suspension apparatus comprises a plurality of adjacent concentric circumferential flow channels to be coupled with one another via a plurality of radial flow channels (See attached figure).

As regards to Claim 24, Kawasaki et al. discloses that each of the pairs of first and second plates includes an axial flow channel to permit flow between adjacent sets of flow channels (See attached figure).

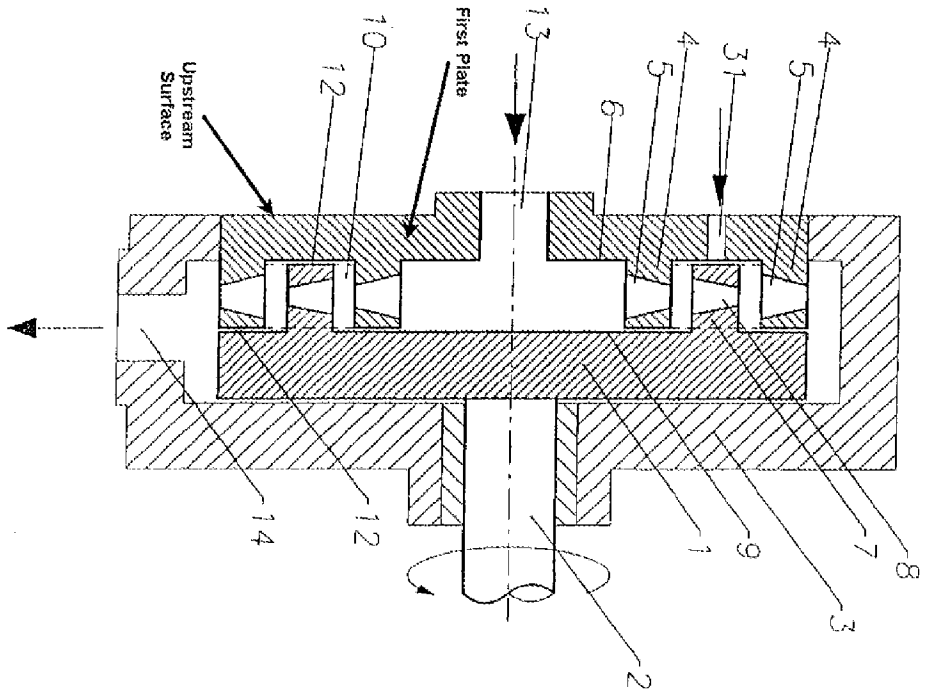
As regards to Claim 25, in the instant case the external compartment/feed pipe is believed to be an extension of, and therefore a part of, the delivery container. Claim 25 does not require that the delivery container comprise a single unitary structure. As such, in the instant case the delivery container of Kawasaki is determined to be the external compartment/feed pipe, the cement pump, and the necessary reservoir (either an integral part of the cement pump or comprising a second external compartment). Therefore the suspension apparatus is deemed to be positioned inside the delivery container.

As regards to Claim 35, Kawasaki et al. discloses an apparatus for administering a suspendible agent in suspension including a suspendible agent, in the instant case concrete (Column 1, Lines 9-13), a suspension of cement, aggregate, water, chemical admixtures, and various other cementitious materials. Kawasaki et al. discloses a delivery container comprising the combination of a cement pump (Column 3, Lines 29-31) in combination with an external compartment comprising a feed pipe (4) having an exit port (See attached figure). Though not explicit, one would reasonably expect and appreciate that the cement pump as taught by Kawasaki et al. has access to a reservoir, either integrally formed with the pump or as an extension of the delivery container apparatus in a second external compartment. Kawasaki et al. further discloses a suspension apparatus disposed within the fluid path (1) including radial flow channels (3; See attached figure) and a plurality of circumferential flow channels (2; See attached figure) coupled in fluid communication by the radial flow channels. Furthermore, it is believed to further be inherent that the necessary reservoir for the device contains a propellant fluid in the form of unmixed cement. Claim 35 does not require that the suspendible agent and propellant fluid be of distinct compositions. The mechanism of action for the device of Kawaski et al. includes a cement pump which induces a fluid to flow through the feed pipe (4) and through the suspension apparatus (1). In this manner the unmixed fluid induced to flow by the cement pump acts as a propellant fluid, forcing a quantity of mixed fluid temporarily disposed within the suspension apparatus (the suspendible agent) to be ejected from the apparatus via the exit port.

3. Claims 1-5, 9, 10, 15, 19, 20, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,354,729 ("Brown").

As regards to Claim 1, Brown discloses an apparatus for administering a suspendible agent in suspension (Column 3, Lines 12-21). Brown discloses the device to comprise a delivery container in the form of a compartment (3) in having a delivery mechanism (1, 2, 4, and 10 in combination; Column 4, Lines 5-17) for causing fluid to flow through the fluid path. This delivery container has an exit port (14) and forms a fluid path between the delivery mechanism and the exit port. Brown further discloses a suspension apparatus disposed within the fluid path (1 and 4 in combination) including a radial flow channel (8) and a plurality of circumferential flow channels (11) coupled in fluid communication by the radial flow channels. While not explicitly stated, one would have reasonably expected and appreciated that the device of Brown must include some means for introducing a fluid to the mixing/suspension apparatus. In other words, a fluid reservoir must be provided upstream from the compartment and though not integral with the compartment, is considered to be part of the delivery container. Furthermore, while not explicit, it is believed to be inherent that the device of Brown discloses his device in conjunction with a propellant fluid. Claim 1 fails to necessitate that the suspendible agent and propellant fluid are of two distinct compositions. In the instant case it is believed that the propellant fluid of Brown is an upstream quantity of fluid that in part displaces the fluid temporary disposed within the mixing/suspension apparatus (the suspendible agent). The mechanism of action of Brown is believed to be in part

because of the movement of the rotor and the stator and the introduction of new fluid to the system, propelling the mixed fluid to the exit port.



As regards to Claim 2, Brown discloses a plurality of circumferential dividing walls to define the circumferential flow channels (7).

As regards to Claim 3, Brown discloses gaps within the circumferential dividing walls to define radial flow channels (8).

As regards to Claim 4, Brown discloses an apparatus for administering a suspendible agent in suspension (Column 3, Lines 12-21). Brown discloses the device to comprise a delivery container in the form of a compartment (3) in having a delivery mechanism (1, 2, 4, and 10 in combination; Column 4, Lines 5-17) for causing fluid to flow through the fluid path. This delivery container has an exit port (14) and forms a fluid path between the delivery mechanism and the exit port. Brown further discloses a

suspension apparatus disposed within the fluid path (1 and 4 in combination) including a radial flow channel (8) and a plurality of circumferential flow channels (11) coupled in fluid communication by the radial flow channels. While not explicitly stated, one would have reasonably expected and appreciated that the device of Brown must include some means for introducing a fluid to the mixing/suspension apparatus. In other words, a fluid reservoir must be provided upstream from the compartment and though not integral with the compartment, is considered to be part of the delivery container. Furthermore, while not explicit, it is believed to be inherent that the device of Brown discloses his device in conjunction with a propellant fluid. Claim 1 fails to necessitate that the suspendible agent and propellant fluid are of two distinct compositions. In the instant case it is believed that the propellant fluid of Brown is an upstream quantity of fluid that in part displaces the fluid temporary disposed within the mixing/suspension apparatus (the suspendible agent). The mechanism of action of Brown is believed to be in part because of the movement of the rotor and the stator and the introduction of new fluid to the system, propelling the mixed fluid to the exit port. Brown further discloses the apparatus to comprise a first plate (See attached figure) having a plurality of circumferential dividing walls (4) and having opposed downstream (6) and upstream (See attached figure) surface having an axial channel (13) extending between them. In the instant case the term "upstream" is afforded is customary dictionary definition as "in the direction opposite to the flow of the stream". Based on its customary definition the term "upstream" does not require that the fluid actually make contact with the surface, just that the surface is in a direction opposite to the flow of the stream.

As regards to Claim 5, Brown discloses radial dividing walls in the form of vanes (10) which intersect the circumferential dividing walls in order to block the circumferential flow channels and divert fluid flow through the radial flow channels (Column 3, Lines 63-67).

As regards to Claim 9, Brown discloses the axial flow channel (13) to be located adjacent to a center of said first plate.

As regards to Claim 10, Brown discloses a second axial flow channel (31) adjacent to a peripheral edge of the first plate. In the instant case the term "adjacent" does not refer to "directly adjacent", rather it is afforded its customary dictionary definition as "not distant", therefore qualifying "adjacent" as a relative term. As can be seen in Figure 1, the axial flow channel (31) is not distant from the peripheral edge as compared to other areas of the first plate.

As regards to Claim 15, Brown discloses an alternate embodiment (not pictured) that mounts the rotor and stator such that the circumferential dividing walls are concentrically configured (Column 8, Lines 11-18).

As regards to Claim 19, Brown discloses an apparatus for administering a suspendible agent in suspension (Column 3, Lines 12-21). Brown discloses the device to comprise a delivery container in the form of a compartment (3) in having a delivery mechanism (1, 2, 4, and 10 in combination; Column 4, Lines 5-17) for causing fluid to flow through the fluid path. This delivery container has an exit port (14) and forms a fluid path between the delivery mechanism and the exit port. Brown further discloses a suspension apparatus disposed within the fluid path (1 and 4 in combination) including a

radial flow channel (8) and a plurality of circumferential flow channels (11) coupled in fluid communication by the radial flow channels. While not explicitly stated, one would have reasonably expected and appreciated that the device of Brown must include some means for introducing a fluid to the mixing/suspension apparatus. In other words, a fluid reservoir must be provided upstream from the compartment and though not integral with the compartment, is considered to be part of the delivery container. Furthermore, while not explicit, it is believed to be inherent that the device of Brown discloses his device in conjunction with a propellant fluid. Claim 19 fails to necessitate that the suspendible agent and propellant fluid are of two distinct compositions. In the instant case it is believed that the propellant fluid of Brown is an upstream quantity of fluid that in part displaces the fluid temporary disposed within the mixing/suspension apparatus (the suspendible agent). The mechanism of action of Brown is believed to be in part because of the movement of the rotor and the stator and the introduction of new fluid to the system, propelling the mixed fluid to the exit port. Furthermore, Claim 19 does not require that the delivery container comprise a single unitary structure. As such, in the instant case the delivery container of Brown is determined to be the compartment and the necessary upstream reservoir. Therefore the suspension apparatus is deemed to be positioned inside the delivery container.

As regards to Claim 20, Brown discloses an alternate embodiment (not pictured) that mounts the rotor and stator such that the circumferential dividing walls are concentrically configured therefore necessitating that the circumferential flow channels are also concentrically arraigned. (Column 8, Lines 11-18).

As regards to Claim 35, Brown discloses an apparatus for administering a suspendible agent in suspension (Column 3, Lines 12-21). Brown discloses the device to comprise a delivery container in the form of a compartment (3) in having a delivery mechanism (1, 2, 4, and 10 in combination; Column 4, Lines 5-17) for causing fluid to flow through the fluid path. This delivery container has an exit port (14) and forms a fluid path between the delivery mechanism and the exit port. Brown further discloses a suspension apparatus disposed within the fluid path (1 and 4 in combination) including a radial flow channel (8) and a plurality of circumferential flow channels (11) coupled in fluid communication by the radial flow channels. While not explicitly stated, one would have reasonably expected and appreciated that the device of Brown must include some means for introducing a fluid to the mixing/suspension apparatus. In other words, a fluid reservoir must be provided upstream from the compartment and though not integral with the compartment, is considered to be part of the delivery container. Furthermore, while not explicit, it is believed to be inherent that the device of Brown discloses his device in conjunction with a propellant fluid. Claim 35 fails to necessitate that the suspendible agent and propellant fluid are of two distinct compositions. In the instant case it is believed that the propellant fluid of Brown is an upstream quantity of fluid that in part displaces the fluid temporary disposed within the mixing/suspension apparatus (the suspendible agent). The mechanism of action of Brown is believed to be in part because of the movement of the rotor and the stator and the introduction of new fluid to the system, propelling the mixed fluid to the exit port.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,368,382 ("Kawasaki et al.") as applied to Claim 21 above.

As regards to Claim 22, Kawasaki et al. discloses the device substantially as claimed except for explicitly disclosing that the ratio of volume of the flow channels to a volume occupied by the dividing walls is from about 0.25-0.5. However, barring any explicit showing that this particular configuration solves any expressly stated problems and is more than just one of the many design configurations one having ordinary skill in the art would have find obvious to configure the ratio of the volume of flow channels to the volume of occupied space of the device of Kawasaki et al. to be between approximately 0.25 – approximately 0.5.

Allowable Subject Matter

7. Claims 6, 7, and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As regards to Claims 6-7, Brown fails to disclose the plurality of dividing walls being distributed between the upstream and downstream surfaces. This limitation has been interpreted to mean that both the upstream and downstream surfaces contain dividing walls, however Brown only discloses a downstream surface having dividing walls, and it is not clear how one having ordinary skill in the art would modify the device of Brown in such a manner. Therefore, Claims 6-7 may contain allowable subject matter.

As regards to Claims 11-12, Brown fails to disclose a third plate in conjunction with the first and second plates, nor is it clear how one having ordinary skill in the art would modify the embodiment of Figure 1 as to include a third plate. While in an alternative embodiment (Figure 5) Brown does teach an apparatus comprising five plates, these plates do not have the required flow channels in order to meet the limitations of Claim 11, nor is it clear how one having ordinary skill in the art would modify the embodiment of Figure 5 to include such flow channels. Therefore, Claims 11-12 may contain allowable subject matter.

As regards to Claim 13, Brown fails to disclose that the first and second plates contact one another, instead disclosing a small gap (12) between them. These annular

spaces are believed to be integral to the function of the device of Brown; therefore there is no motivation to remove them. Therefore, Claim 13 may contain allowable subject matter.

As regard to Claim 14, neither Brown fails to disclose that the plurality of circumferential dividing walls contain irregularities in order to change the direction of flow of a suspendible agent. Therefore, Claim 14 may contain allowable subject matter.

Response to Arguments

8. Applicant's arguments filed 01/04/2008 have been fully considered but they are not persuasive.

Applicant's argument that Brown does not disclose the use of his device in conjunction with a propellant fluid is not found to be persuasive. The term "propellant" is afforded its customary dictionary definition as "capable of driving forward on onward by or as if by means of a force that imparts motion". The claims do not establish a causal chain between the introduction of the propellant fluid into the suspension apparatus and the ejection of the suspendible agent, only requiring that the two events occur during the same time frame. While it is the Examiner's position that introduction of the "propellant fluid" of the device of Brown would in part cause the ejection of the already mixed "suspendible agent", such interaction is not even necessary to meet the limitations of the claims. Additionally as disclosed above, it is believed that an upstream reservoir is a necessary component of the device of Brown, and it is believed that this reservoir would hold the quantity of unmixed "propellant fluid".

Applicant's argument that Kawasaki et al. does not disclose the user of his device in conjunction with a propellant fluid is not found to be persuasive. As Kawasaki et al. discloses his device as a static mixing apparatus it is believed to be inherent that the mechanism of action used to eject the quantity of suspendible agent in suspension is the introduction of an additional "propellant fluid". The as stated above, the propellant fluid and the suspendible agent need not be of different composition. Rather the two fluids can have identical compositions, distinct in their location within the apparatus and their immediate function. In the instant case the term "propellant fluid" is reserved for the quantity of fluid not yet mixed and in the process of displacing the already mixed "suspendible agent" from the apparatus. Additionally as disclosed above, it is believed that an upstream reservoir is a necessary component of the device of Kawasaki, and it is believed that this reservoir would hold the quantity of unmixed "propellant fluid".

The remainder of Applicant's arguments filed 01/04/2008 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

9. This action is non-final because Claims 8, 19, and 22-24 previously indicated as allowable subject matter were not afforded their broadest reasonable interpretation in the art. As such these claims stand newly rejected as disclosed above.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM CARPENTER whose telephone number is (571) 270-3637. The examiner can normally be reached on Monday through Thursday from 7:00AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WC
2/26/2008
/Kevin C. Sirmons/
Supervisory Patent Examiner, Art Unit 3767